Application of NASA Earth Science Data to Landscape-Scale Resource Management Needs in the Pacific Northwest: An Institutional Collaboration

Roger Anderson, Kathleen Judd, Ann Lesperance*
Pacific Northwest National Laboratory
John Bolte, Oregon State University

Keywords: Sustainable development, ecosystem change, collaboration

Six Pacific Northwest research institutions are collaborating to develop and apply geospatial technologies and data to resource management needs. The Pacific Northwest Regional Collaboratory (PNWRC), with seed funding provided by NASA through the Raytheon Synergy Program, has initiated a set of projects in five applications areas: streamflow forecasting; invasive weeds monitoring; riparian habitat evaluation; coastal assessment; and regional sustainability.

These issues are likely to influence the Puget Sound- Georgia Basin over time and at regional scales. Based on extensive input from potential regional end-users, the PNWRC is developing a Regional Sustainability Decision Support System, which will provide regionally relevant datasets and customized data products and tools to support natural resource policy and management decisions. Eventually, the PNWRC will provide an ongoing analysis of sustainability trends to several resource management agencies across the Pacific Northwest. The idea is to be able to answer questions such as whether and how global climate change is affecting key aquatic habitats in the region. This poster describes how end user needs are being translated into decision support tools. The authors invite input from the scientific and policy communities as to priority applications for these collective institutional capabilities.